

**Conservation In Transition shaping the...  
Role of Landscape Conservation Cooperatives in  
Sustaining Natural and Cultural Resources**

**How Will We Know When We Get There?**

**Conservation In Transition shaping the...  
Role of Landscape Conservation Cooperatives in  
Sustaining Natural and Cultural Resources**

**Objectives:**

- Provide A Directional Overview of Landscape Conservation Cooperatives in the Southeast
- Underscore the Importance of Calibrating Science – The “For What” Factor...
- Acknowledge Critical Steps Being Taken To Ensure The Emergence of a (Inter)National Network of LCCs.

**Disruptive Change: Impacts on SE Fish and Wildlife Resources**  
Admiral Samuel J. Locklear, Commander Allied Joint Force Command, Naples. Sept 2011

“The world we’re in today is undergoing as rapid a change as any in the history of mankind. Everything necessary to support the world’s population is changing at incredible rates causing increased pressure on the planet, environment, society and individuals in general”

**Disruptive Change: Impacts on SE Fish and Wildlife Resources**  
Admiral Samuel J. Locklear, Commander Allied Joint Force Command, Naples. Sept 2011

“The world we’re in today is undergoing as rapid a change as any in the history of mankind. Everything necessary to support the world’s population is changing at incredible rates causing increased pressure on the planet, environment, society and individuals in general”

“The conservation community faces unprecedented issues of scale, pace, and complexity in sustaining our Nation’s natural resources.”

“The conservation challenges of the 21<sup>st</sup> Century represent a force of change more far-reaching and consequential than any previously encountered.”

**Disruptive Change: Impacts on SE Fish and Wildlife Resources**

The first step toward creating an improved future is developing the ability to envision it. VISION will ignite the fire of passion that fuels our commitment to do **WHATEVER IT TAKES** to achieve excellence. Only VISION allows us to transform dreams of greatness into the reality of achievement through human action. VISION has no boundaries and knows no limits. Our VISION is what we become in life.” ~Tony Dungy

“The conservation community faces unprecedented issues of scale, pace, and complexity in sustaining our Nation’s natural resources.”

“The conservation challenges of the 21<sup>st</sup> Century represent a force of change more far-reaching and consequential than any previously encountered.”

**Disruptive Change: Impacts on SE Fish and Wildlife Resources**

**A Perpetual Driver of Disruptive Innovation in Fish & Wildlife Resource Agencies**

Are Not The F&W Agencies of Yesterday

Fish & Wildlife Agencies Of Today...

Nor Will They Be The F&W Agencies of Tomorrow

### Conservation In Transition shaping the... Role of Landscape Conservation Cooperatives in Sustaining Natural and Cultural Resources

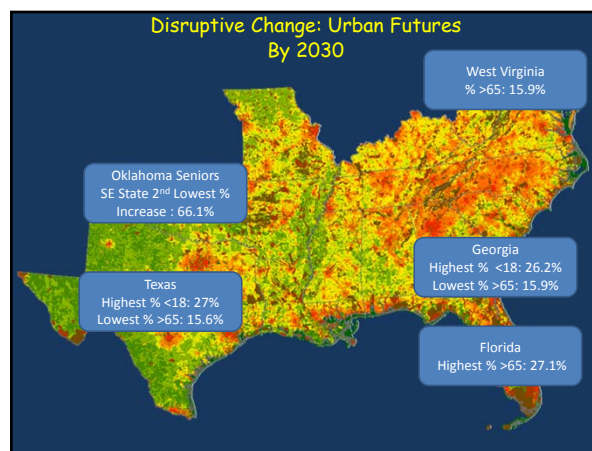
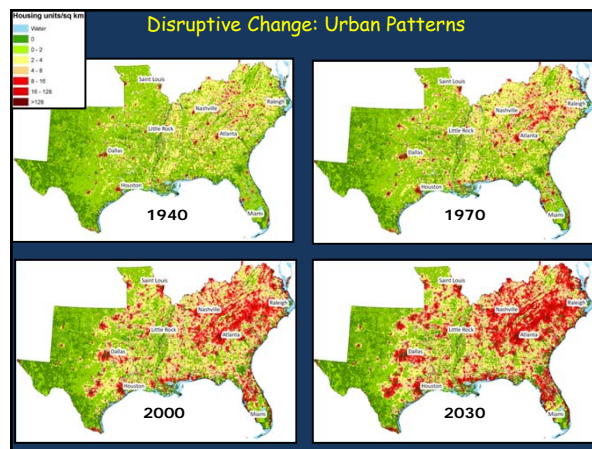
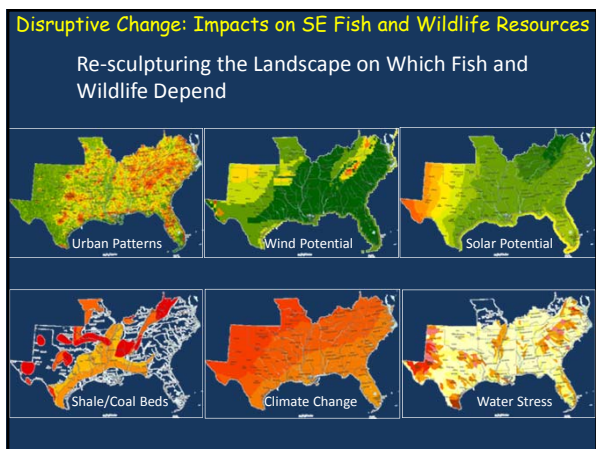
**Strategic Habitat Conservation**  
*Final Report of the National Ecological Assessment*

**Leaders' Guide**  
*Transformation of State Fish & Wildlife Agencies  
Ensuring the Future of Conservation in a Rapidly Changing World*

**Conservation in Transition**  
*Leading Change in the 21st Century*

### Resource Conservation and Conservation Science An Operational Comparison

|                       | Resource Conservation   | Conservation Science  |
|-----------------------|---|---|
| <b>Planning</b>       | <ul style="list-style-type: none"> <li>• Activity oriented</li> <li>• Administratively focused</li> <li>• Programmatically explicit</li> <li>• Opportunity based</li> </ul> | <ul style="list-style-type: none"> <li>• Outcome oriented</li> <li>• Model based</li> <li>• Spatially explicit</li> <li>• Multi-scaled</li> </ul>                                     |
| <b>Implementation</b> | <ul style="list-style-type: none"> <li>• Protection, restoration, and management pursued as ends</li> <li>• Opportunities prioritized at the project scale</li> </ul>       | <ul style="list-style-type: none"> <li>• Protection, restoration, and management pursued as means</li> <li>• Opportunities prioritized against landscape scale assessments</li> </ul> |
| <b>M&amp;E</b>        | <ul style="list-style-type: none"> <li>• An operational luxury</li> <li>• Appropriate as an element of research</li> </ul>  | <ul style="list-style-type: none"> <li>• Essential to assessing outcomes</li> <li>• Integral to structured, adaptive decision making</li> </ul>                                       |
| <b>Research</b>       | <ul style="list-style-type: none"> <li>• Priorities are derived from periodic calls to programs and field stations to identify their needs</li> </ul>                       | <ul style="list-style-type: none"> <li>• Aimed at testing assumptions and uncertainties of biological planning and assessment</li> </ul>  |

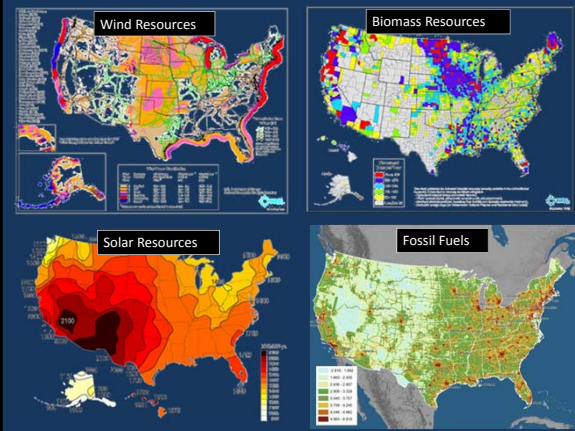


### Disruptive Change: Global Energy Consumption and Dynamics



"I challenge you to join me in setting a new goal: By 2035, 80 percent of America's electricity will come from clean energy sources.


Some folks want wind and solar. Others want nuclear, clean coal and natural gas. To meet this goal, we will need them all — and I urge Democrats and Republicans to work together to make it happen."

### Disruptive Change: Climate Change

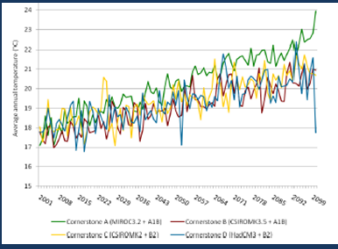
#### Southern Forest Futures Project

- Since 1960, all but two southern capital cities (Montgomery, AL and Oklahoma City, OK) have experienced a statistically significant increase in average annual temperature, but none has experienced significant trends in precipitation.


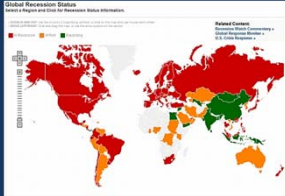



Climate Change

- The South is forecasted to experience warmer temperatures for the duration of the 21st century.
- Forecasts are mixed for precipitation changes for the same period.



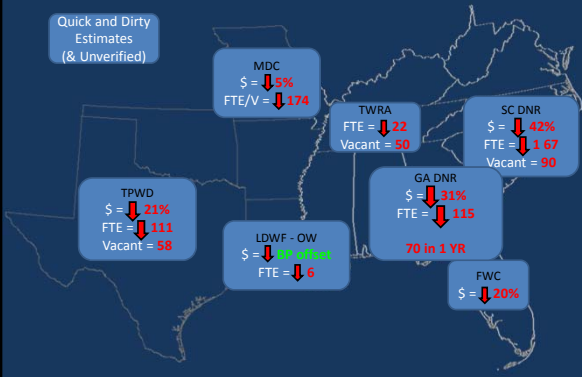
### Disruptive Change: Economics

### Disruptive Change: Economics


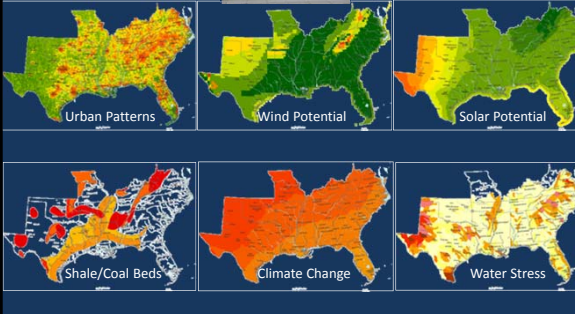
#### State Fish and Wildlife Agencies Within Last 4 Years

Quick and Dirty Estimates (& Unverified)



- MDC: \$ = ↓ 5%, FTE/V = ↓ 174
- TWRA: FTE = ↓ 22, Vacant = 90
- SC DNR: \$ = ↓ 42%, FTE = ↓ 1.67, Vacant = 90
- GA DNR: \$ = ↓ 31%, FTE = ↓ 115, 70 in 1 YR
- FWC: \$ = ↓ 20%
- TPWD: \$ = ↓ 21%, FTE = ↓ 111, Vacant = 58
- LDWF - OW: \$ = ↓ 89 million, FTE = ↓ 6

### Disruptive Change: Anticipated SEI as to find Wildlives Resources

### Disruptive Change: A Perpetual Driver of Disruptive Innovation

**Global CEO Study: The Enterprise of the Future**

Organizations are bombarded by change, and many are struggling to keep up. 8 of 10 CEOs see significant change ahead, and yet the gap between expected change and the ability to manage it has almost tripled in < 2 years.

Nearly all CEOs are adapting their business models — two-thirds are implementing extensive innovations. More than 40 percent are **changing their enterprise models to be more collaborative**.

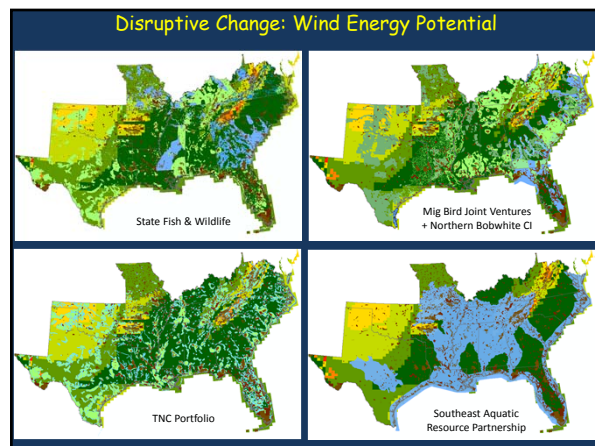
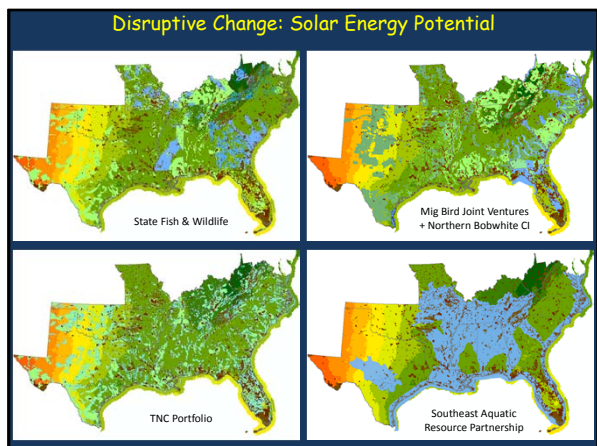
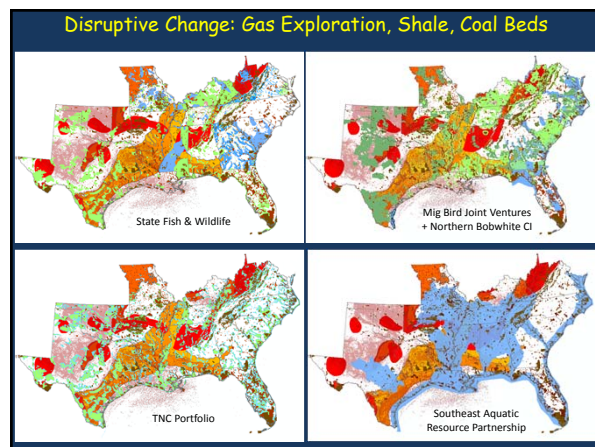
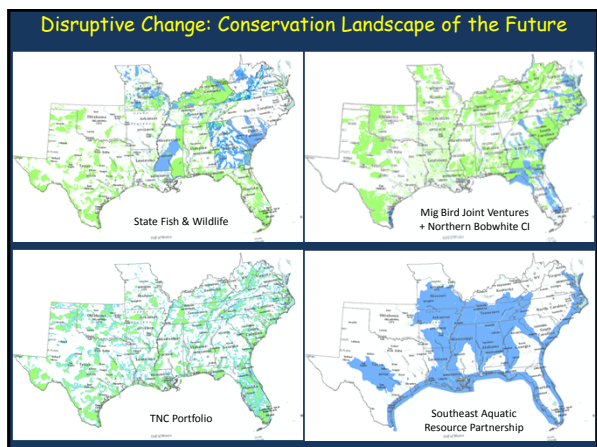
Outperforming CEOs are introducing more “disruptive change” to **promote adaptive innovation** to remain relevant in rapidly changing world.

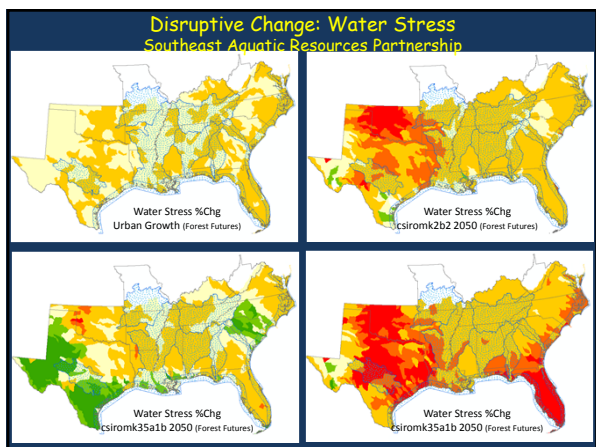
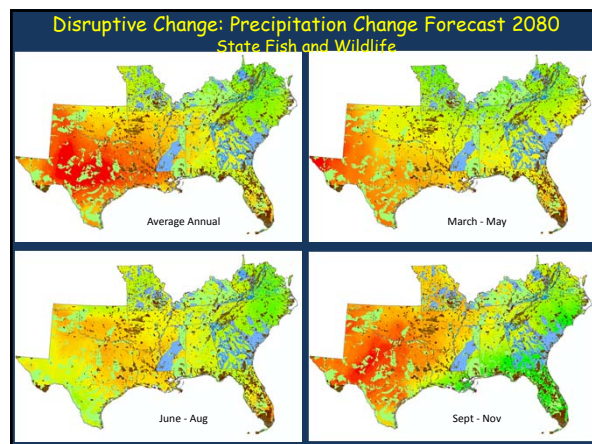
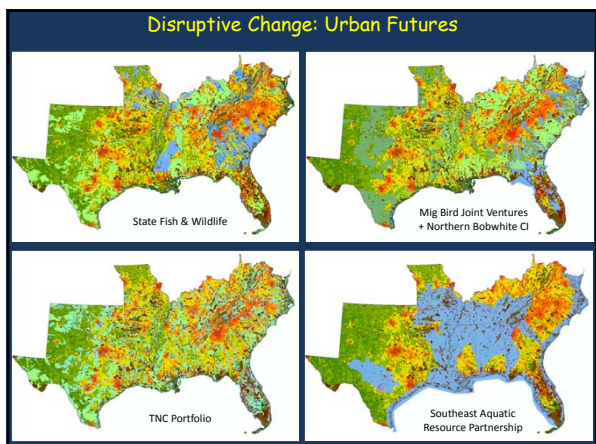
### Disruptive Change: A Perpetual Driver of Disruptive Innovation

Are Not The F&W Agencies of Yesterday  
Fish & Wildlife Agencies Of Today...  
Nor Will They Be The F&W Agencies of Tomorrow

Documents included in the collage:

- NORTH AMERICAN WATFOWL MANAGEMENT PLAN
- Missouri Comprehensive Wildlife Strategy
- Leaders' Guide: Transformation of State Fish & Wildlife Agencies
- LOUISIANA COMPREHENSIVE WILDLIFE CONSERVATION STRATEGY
- Partners In Flight: North American Landbird Conservation Plan
- National Fish Habitat Action Plan





### SE Conservation Adaptation Strategy

#### Conservation Landscape of the Future

##### Briefing To The Directors: Progress/Status Report

Southeastern Association of Fish and Wildlife Agencies

SEAFWA Conference  
October 25<sup>th</sup> 2011, Nashville, TN

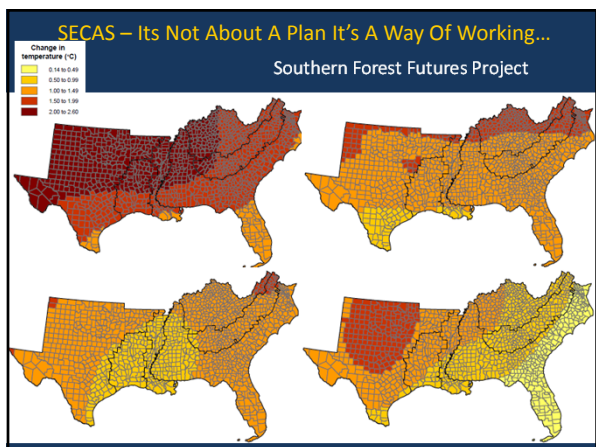
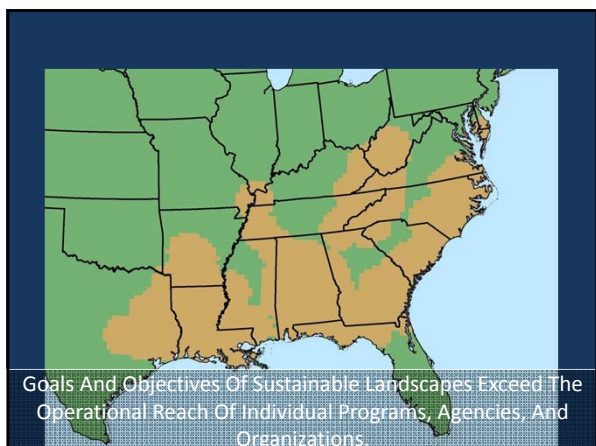
### SE Conservation Adaptation Strategy

#### Conservation Landscape of the Future

##### Briefing To The Directors: Progress/Status Report

SEAFWA Conference  
October 25<sup>th</sup> 2011, Nashville, TN

- ### SE Conservation Adaptation Strategy
- #### Conservation Landscape of the Future
- ##### Draft Outline of A SECAS:
- Conservation Targets – Species, Habitats, Ecological Functions & Processes
  - Ability to “See” The System
  - Science-based Adaptive Management Framework
  - Horizontally Integrated Conservation Science Assessment Capacity
  - Conservation Delivery Tools
  - Risk Management Tools
  - Monitoring Systems & Capacity
  - Engaging The Public - Quantify Conservation Values & Recreation Attitudes of Societal Sectors



- ### SE Conservation Adaptation Strategy Conservation Landscape of the Future
- **Directors Request LCC and science staff Facilitate Broader Engagement...**
    - **State Agencies:** Work With POC To Facilitate Broader Dialog & Engagement.
    - **Federal Agencies:** Work With Cindy Dohner (FWS SE Regional Director) To Facilitate Broader Dialog and Engagement.
    - **LCCs & CSC:** States & FWS Bring SECAS Forward To CSC And LCC Steering Committees To Focus Science & Technical Capacity.
    - **Conservation Science Staff of LCCs:** Engage The Conservation And Science Communities (To Include Existing Partnerships Such As SARP, JVs) In Collaboration To Focus Science And Resources Toward Defining The Conservation Landscape Of The Future.

### Conservation In Transition shaping the... Role of Landscape Conservation Cooperatives in Sustaining Natural and Cultural Resources

**How Will We Know When We Get There?**

- ### How will we know when we're there?
- The Conservation Science Community Can Lay Before The Public A Transparent Science-based...
- Vision of the landscape to support and sustain natural and cultural resources.
  - Assessment of the current condition of our nation's landscapes and waterscapes to support those resources.
  - Expression of how much, how much more, and where to prioritize conservation actions across the landscape.
  - Ability to quantify impacts conservation actions (reforestation, permit, LE, fish passage, etc) have on the sustainability of natural and cultural resources.
  - Ability to quantify impacts development actions (housing, civil works, mining, biofuel etc) have on the sustainability of natural and cultural resources.
  - Ability to forecast alternative future conditions to the sustainability of natural and cultural resources as a function of urban growth models, climate change scenarios, energy development.
- The Conservation Science Community Engaging The Citizenry  
In The Search For Socially Viable Solutions.

Resource Conservation and Conservation Science  
An Operational Comparison

|                       | Resource Conservation   | Conservation Science  |
|-----------------------|---|---|
| <b>Planning</b>       | <ul style="list-style-type: none"> <li>• Activity oriented</li> <li>• Administratively focused</li> <li>• Programmatically explicit</li> <li>• Opportunity based</li> </ul> | <ul style="list-style-type: none"> <li>• Outcome oriented</li> <li>• Model based</li> <li>• Spatially explicit</li> <li>• Multi-scaled</li> <li>• Predictive</li> </ul>               |
| <b>Implementation</b> | <ul style="list-style-type: none"> <li>• Protection, restoration, and management pursued as ends</li> <li>• Opportunities prioritized at the project scale</li> </ul>       | <ul style="list-style-type: none"> <li>• Protection, restoration, and management pursued as means</li> <li>• Opportunities prioritized against landscape scale assessments</li> </ul> |
| <b>M&amp;E</b>        | <ul style="list-style-type: none"> <li>• An operational luxury</li> <li>• Appropriate as an element of research</li> </ul>  | <ul style="list-style-type: none"> <li>• Essential to assessing outcomes</li> <li>• Integral to structured, adaptive decision making</li> </ul>                                       |
| <b>Research</b>       | <ul style="list-style-type: none"> <li>• Priorities are derived from periodic calls to programs and field stations to identify their needs</li> </ul>                       | <ul style="list-style-type: none"> <li>• Aimed at testing assumptions and uncertainties of biological planning and assessment</li> </ul>  |